

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch

690 Walnut Ave.St. 150

Vallejo, CA 94592-1133

(707) 649-5453

(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 99.28**WELDING INSPECTION REPORT****Resident Engineer:** Casey, William**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-027104**Date Inspected:** 30-Jan-2012**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1530**Contractor:** L & M Industrial Fabricators**Location:** Tangent, Oregon**CWI Name:** Tom Dreyer**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** Tower Head Parapet**Summary of Items Observed:**

This Quality Assurance (QA) Inspector, Art Peterson arrived at L & M Industrial Fabricators between the times noted above to randomly observe Quality Control (QC) personnel monitor the welding operations performed by L & M personnel and the NDT inspection on the fabrication of chimney parapet walls to the Tower Head Top Plate. The following observations for the extra work being performed to the following contract change order were:

CCO: 196 - Description: Construct parapet walls at the Tower Head

North Tower Chimney Parapet:

This QA Inspector randomly observed L & M welder Jake Schuld (Welder ID #17) performing the fillet weld pass operation per the Flux Cored Arc Welding (FCAW-G) gas shielding process in the (2F) horizontal position connecting a flat plate-(A6i) to stiffener plates (A6e, A6f and A6j) that were previously welded to the internal side of parapet wall plate-(A6b) of the North Tower Chimney Head. This QA Inspector observed QC Inspector Tom Dreyer verify prior to the start of the fillet weld operation that the minimum preheat temperature as per the approved WPS was established and afterwards verified that the welding parameters (Amps, Volts and Travel Speed) were in accordance with WPS-D1.5-FC-006-2F using Hobart Excel Arc E71T-1 (.052") diameter electrode.

The fillet weld operation was in process at the end of this QA Inspectors' shift.

South Tower Chimney Parapet:

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This QA Inspector observed L & M welder Otis Smith (Welder ID #19) performing the grinding operation to remove (4) MT longitudinal linear indications detected on the surface at "Y" location (1197~1208) mm, (1244~1251) mm, (1961~1966) mm, and (2256~2260) mm of the existing PJP corner joint groove weld of the Tower Head top plate connected to Skin Plate D of the South Chimney Tower Head. The welder was preparing the excavated area for welding pending the approval by the Engineer in writing of WPS LM-FC-01-Repair. The indications that the welder were grinding on were visibly observed and appeared to be slag inclusions running longitudinally to the PJP groove weld and the indications were present for the full depth of the existing (9) mm weld size PJP groove corner-joint weld that was previously welded at the ZPMC facility on Changxing Island, Shanghai, China.

The grinding operation was in process at the end of this QA Inspectors' shift.



Summary of Conversations:

No significant conversations were reportable on this date.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Nina Choy, 510-385-5910, who represents the Office of Structural Materials for your project.

Inspected By: Peterson, Art

Quality Assurance Inspector

Reviewed By: Mertz, Robert

QA Reviewer